Art. XXI.—On the Occurrence of the Selachian Genus Corax in the Lower Cretaceous of Queensland.

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(With Text Figure).

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Introductory Remarks.—Already two species of sharks' teeth have been recorded from the Lower Cretaceous (Rolling Downs Formation) of Queensland by Mr. R. Etheridge, junr. They are represented by a tooth¹, referred to Lamna appendiculata, Agassiz, and seven conjoined vertebrae², described under the name of Lamna daviesii. Up to the present, apparently, no example of the truly Cretaceous genus Corax had been observed.

The specimen herein described occurs on a weathered slab of limestone, the surface of which is crowded with fragments of fish-remains and a small *Belemnite*, possibly allied to *B. diptycha*, McCoy. The other fish-remains noticed seem to belong to an indeterminate ganoid genus, shown by the presence of polished scale-fragments, awl-shaped teeth and small vertebrae. This interesting fossiliferous limestone specimen was presented to the Museum by G. H. Roche, Esq., who had obtained it from H. A. C. Webb, Esq., its discoverer. The locality of the specimen is the Hamilton River, about 40 miles from Boulia, Queensland.

Description.—This specimen is evidently a young tooth, since the point of the crown is much depressed and acute. The base of the tooth is large in proportion, a characteristic of Corax, and is broadly wedge-shaped, tapering to the lower margin. There is no indication of an internal cavity to the tooth, as in Lamna and other allied genera. The anterior coronal margin is flexuous, and the depressed point makes it to be almost parallel with the

¹ R. Etheridge, Jnr., in Etheridge and Jack's Geol, and Pal. of Queensland and New Guinea, 1892, pp. 503, 504.

² Op. supra cit., p. 503.

basal margin of the root. It is the inner surface of the tooth which is exposed on the slab, and it is highly convex. The anterior and posterior coronal margins are depressed and flanged, and under magnification the edges are seen to be feebly crenate.

Dimensions.—Length of root, 5.5 mm.; entire length of erown, 6 mm.; height of root, 2 mm.; height of erown from upper limit of root, 1.25 mm.

Remarks. The genus Corar is typically an Upper Cretaeeous fossil, but one species, Corax antiquus, Deslong., has been described from the Lower Oolite of Normandy.2 In its somewhat depressed form and inconspicuous serrated margins the present example most nearly resembles C. affinis, Agassiz, from the Upper Cretaceous (Panian and Upper Senonian) of Europe. Agassiz's figures of C. appendiculatus⁴ also closely resemble our specimen, a form regarded by Smith Woodward as synonymous either with C. pristodontus, Ag., or C. affinis, Ag. In C. affinis, however, there is generally a broad posterior dentiele near the base of the coronal margin, which is entirely absent in the Australian specimen. Upon these grounds it seems advisable to keep the Australian form as a distinct species, also taking into consideration the fact that it occurs in a rock of an older division of the Cretaceous. It may therefore be referred to under the name of Corar australis.



Corax Australis, sp. nov.

Lower Cretaceous, Hamilton River, Queensland.

¹ See Smith Woodward, Catalogue Foss Fishes (Brit. Mus.), 1889, pp. 422-429.

² Deslongchamps, Le Jura Normand, Mon. vi., 1877, p. 4, pl. i., figs. 4, 5.

³ Agassiz, Poiss. Foss., vol. iii., 1843, p. 227, pl. xxvia, figs. 21-34. Smith Woodward, op. cit., p. 427. Idem, Proc. Geol. Assoc., vol. xiii., 1895, p. 199, pl. vi., figs. 19-22.

⁴ Agassiz, op. cit., pl. xxvia, figs. 16-20.

⁵ Smith Woodward, op. cit., p 423 (footnote).